Application No. 10/624,944 Docket No.: 04577/000N072-US0

Amendment dated August 19, 2008

Reply to Non-Final Office Action of February 19, 2008

A LISTING OF THE CLAIMS

The following listing of claims is presented as a courtesy to the Examiner.

1. (Original) A process for the preparation of barium titanate powders, comprising

separately and simultaneously introducing into a high-gravity reactor an aqueous solution (I)

containing salts or organometallic compounds of barium and titanium, preheated to a temperature

of from 60°C to 65°C, and having a Ba/Ti molar ratio of more than 1, and an aqueous basic solution

(II) containing an inorganic or organic base, preheated to a temperature of from 60°C to 100°C;

performing the reaction of the solution (I) with the solution (II) at a temperature of from 60°C to

100°C, while maintaining the reaction mixture at a constant OH- concentration, then filtrating and

washing the resulting powdery reaction product with deionized water to remove impurity ions and

the excessive barium ions, and finally, drying to obtain barium titanate powders.

2. (Previously Presented) A process according to claim 1, in which in the solution

(I), the total concentration of metal ions(Ba²⁺+Ti⁴⁺) ranges from 0.1 to 2.0 mol/L and the Ba/Ti

molar ratio is from 1.2 to 2.0, and the base concentration in the solution (II) ranges from 3 to 15

mol/L.

2

Docket No.: 04577/000N072-US0

Application No. 10/624,944 Amendment dated August 19, 2008

Reply to Non-Final Office Action of February 19, 2008

3. (Original) A process according to claim 1, in which the flow rates of the solutions

(I) and (II) vary from 5 to 300L/h.

4. (Original) A process according to claim 1, in which the flow rate ratio of solution

(I) to solution (II) ranges from 0.5 to 10.

5. (Original) A process according to claim 1, in which the pH value of the reaction

mixture is maintained constant at about 14.

6. (Original) A process according to claim 1, in which the salts of barium and

titanium are selected from the group consisting of halides, nitrate, acetate, perchlorate, oxalate and

alkoxides, and the base is selected from the group consisting of alkali metal or alkali-earth metal

hydroxides, and quaternary ammonium bases.

7. (Original) A process according to claim 1, in which the salts are chlorides and the

base is NaOH, KOH or quaternary ammonium bases.

8. (Canceled)

3

Docket No.: 04577/000N072-US0

Application No. 10/624,944 Amendment dated August 19, 2008

Reply to Non-Final Office Action of February 19, 2008

9. (Original) A process according to claim 1, in which said high-gravity reactor is a

rotating packed-bed reactor and the high-gravity level of the rotating packed-bed reactor ranges

from 1.25G to 12.500G.

10. (Previously Presented) A barium titrate powder produced by the process of

claim 1, consisting essentially of primary crystalline particles having a uniform particle size and an

approximately spherical morphology.

11. (Previously Presented) A ceramic produced by the process of sintering the

barium titrate powder of claim 10.

12. (Previously Presented) The ceramic of claim 11, wherein the ceramic exhibits

uniform microstructures, homogeneous chemical compositions, small grain size, and a dielectric

constant of up to about 2,500.

4